

REMARKS

Claims 1 and 2 are pending in this application. No claims have been added, canceled or amended. Thus, claims 1 and 2 remain subject to continued examination.

ANTICIPATION REJECTION

Claims 1 and 2 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,518,377 to Shamshoum et al.. Continued rejection on this basis is respectfully traversed and reconsideration is requested at this time.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. In order to meet this standard the identical invention must be shown in as complete detail as is contained in the claim. See, MPEP §2131. Applicant respectfully submits that the cited reference to Shamshoum et al. fails to satisfy this rigorous standard. In particular, as best understood, Shamshoum et al. fails to disclose a thermoplastic which exhibits the claimed crystallization temperature of at least 71°C at a cooling rate of 20°C/min.

The Office Action states that in Shamshoum et al. the cooling rate is 25°C (Col. 12, line 18) rather than the claimed cooling rate of 20 °C but that a difference of 5 °C would have a minimal effect on crystallization temperature. Applicant respectfully submits that the Examiner's analysis is in error both in the interpretation of the cited art as well as in the magnitude of effect of cooling rate on crystallization temperature.

As regards the cooling rate disclosed in Shamshoum et al., the section cited by the examiner actually discloses cooling to 25 °C at a rate of 10 °C/min. Thus instead of a cooling rate which is 5 °C/min. faster than the rate recited in the claim, the cooling rate disclosed in the cited reference is actually 10 °C/min slower. Accordingly, in relative terms, the cooling rate recited in the claims is twice as fast as the cooling rate in Shamshoum et al..

Applicant respectfully submits that if the thermoplastic material cited by the Examiner in example 9 of Shamshoum et al. was subjected to a cooling rate 20 °C/min the resultant crystallization temperature most likely would be well below the reported crystallization temperature of 72.3 achieved at the cooling rate of 10°C/min. Although the exact material from Shamshoum et al. was unavailable for testing, Applicant subjected a plaque of the material of Example 1 of the present application to cooling at 10 °C/min and 20 °C/min and noted the resultant crystallization temperature. At a cooling rate of 10 °C/min the crystallization temperature was 81.7 °C. At a cooling rate of 20 °C/min the

Serial No.: 10/609,080
Inventor(s): Darin L. Dotson

U.S. PTO Customer No. 25280
Case No.: 5425A

crystallization temperature was 73.9 °C. Thus, the 10 °C increase in cooling rate yielded a substantially lower crystallization temperature. In view of the similarity of the base thermoplastic materials in Shamshoum et al. and the present invention, Applicant submits that a similar change in crystallization temperature would be expected in Shamshoum et al.. This indicates that the crystallization temperature of the material disclosed in Shamshoum et al. also most likely would be well below the claimed level of 71 °C if a cooling rate of 20 °C/min is used.

The experimental results and conclusions reached are confirmed in the attached declaration of the inventor Dr. Darin Dotson who carried out the tests.

Should any issues remain after consideration of this Response, the Examiner is invited and encouraged to telephone the undersigned at his convenience.

Fee Authorization: In the event that there are additional fees associated with the submission of these papers, Applicant hereby authorizes the Commissioner to withdraw fees from Deposit Account No. 04-0500.

Extension of Time: A request for a one (1) month extension of time accompanies this response. In the event that additional time is required to have the papers submitted herewith for the above referenced application to be considered timely, Applicants hereby petition for any additional time required to make these papers timely and authorization is hereby granted to withdraw any

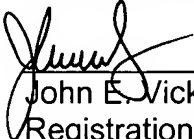
Serial No.: 10/609,080
Inventor(s): Darin L. Dotson

U.S. PTO Customer No. 25280
Case No.: 5425A

additional fees necessary for this additional time from our Deposit Account No.

04-0500.

Respectfully submitted,



John E. Vick, Jr.
Registration No. 33,808

MILLIKEN AND COMPANY
920 Milliken Road, M-495
Spartanburg, SC 29303
Telephone (864) 503-1383
Facsimile (864) 503-1999